New Nearctic Record for Epitranus clavatus F. (Hymenoptera: Chalcididae)

Grissell and Smith (2003) recently documented the first known record of *Epitratus clavatus* F and its inclusive subfamily Epitraninae (Chalcididae) in the Nearctic Region, based on a single female specimen collected from a Malaise trap in West Virginia in 2002.

Epitranus clavatus was originally described from Guyana and subsequently recorded from St. Vincent, Brazil, and Hawaii (see Grissell and Smith 2003 for details). Bouček (1982), who also recorded *E. clavatus* from India, Malaysia, Taiwan, and the Seycehelles, suggested that this parasitoid was likely introduced into tropical America on multiple occasions before effective quarantine measures were enacted. Prior to Grissell and Smith's (2003) reporting of *E. clavatus* in WV in 2002, all previously collected specimens in the New World were found before 1901 (Bouček 1992), a span of over one hundred years.

As a result of a 1997 multi-state arthropod survey supporting house fly integrated pest management programs in caged-layer poultry systems (conducted by PEK under a subcontract to IPM Laboratories, Inc., Locke, NY) and the subsequent identification of parasitoids and predators (by ERH) taken in poultry manure pits at multiple locations in North Carolina, Georgia, California, Alabama, and New York, we report here only the second known collection of E. clavatus from the Nearctic Region. Two female specimens were collected in a Hister House on 8 October 1997 in a high-rise caged-layer poultry house in Monroe, North Carolina (Union Co.), Hister Houses are commercial, disposable (mesh-bottomed) traps that are placed on poultry manure to attract and capture the histerid beetle Carcinops pumilio (Erichson), an important predator of house fly eggs and larvae in poultry facilities (patent number 5,930,945, IPM Laboratories, Inc.).

Because *E. clavatus* has been reared from the pupa of a case-bearing cotton moth in India and from *Tinea palaechrysis* Meyrick or *Crypsithyris* sp. in Malaysia (Boucek 1982), and that pyralids and tineids have a wide range of hosts including stored cotton and fabrics, Grissell and Smith (2003) suggested that *E. clavatus* was likely transported into North America via its moth host in "shipping bags, clothing, and carpeting all made from natural fibers."

Some larvae of Tineidae and Pyralidae also are documented as scavengers in bird nests and in poultry manure. Larvae of the Palearctic moth Niditinea fuscella (L.) (synonym: fuscipuntella Haworth), known as the brown-dotted clothes moth or the poultry-house moth, are frequently observed in nests of birds, mammals, or Hymenoptera (Emmet 1988); breeding in the trash of pigeons' nests and similar refuse (Forbes 1923); often found abundantly in poultry houses (Legner and Eastwood 1973, Legner et al. 1975); and indoors feeding on refuse and on stored products of plant and animal origin (Emmet 1988). Niditinea fuscella is also widely distributed in North America. The moths Pyralis manihotalis Guenée and P. farinalis L. (Pyralidae) and an unidentified species of Monopsis (Tineidae) were inventoried among the many arthropods associated with poultry manure samples from three farms in the Western Cape Province of South Africa (Matanmi and Giliomee 2002). In their study, Matanmi and Giliomee (2002) also reported the emergence of an Epitranis sp. from a moth, a Pyralis sp. (presumably a larva), in the manure at each of these poultry farms.

Although no moths (adults or larvae) were collected at the Monroe, NC, poultry

facility, we hypothesize that larvae of a pyralid or tineid moth (and possibly *N. fuscella*) may have served as the host for *E. clavatus*. The two parasitoid specimens are deposited in the Cornell University Insect Collection, Ithaca, NY. To see a habitus photograph and to review a diagnosis of this chalcid, the reader is referred to Grisself and Smith (2003).

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